Date: Monday, December 14, 2015 at 3:16 PM

To: Bob Batha <bob.batha@bcdc.ca.gov>

Subject: BCDC December 17, 2015 Agenda Item 8 First Phase USCOE 3.8 mile levee South Bay

Bob Batha, Project Review December 14, 2015
San Francisco Bay Conservation and Development Commission
455 Golden Gate Avenue, Suite 10600
San Francisco, California 94102

RE: BCDC December 17, 2015 Board Agenda Item 8, First Phase USCOE 3.8 mile levee in South Bay, adjacent Alviso and San Jose Treatment Facility with return of 2,900 acres former salt ponds to tidal action.

Dear Bob Batha,

In regards your December 17 BCDC Commission Agenda Item 8, First Phase of USCOE 3.8 mile levee in South San Francisco Bay adjacent to the Community of Alviso, and San Jose Sewage Treatment Facility, I would like to submit my concerns on advisability of the proposed placement of levee and return to tidal action of approximately 2,900 acres of former salt ponds.

Perhaps, initially, COE should reference early San Francisco COE flood project studies for Coyote Creek and Guadalupe River and Adjacent Streams and a San Francisco Bay Tidal Stage vs. Frequency Study of 1984. Data in reports estimate 100 year flood flows in Guadalupe River at 17,000 cfs, and similar for Coyote Creek, with proviso that upstream reservoirs are functioning to attenuate peak events.

It is my concern that peak flood flows in either or both of these rivers cannot be absorbed into the South Bay sloughs and wetlands, especially during high tides, and so this COE flood levee will not offer flood protection to Alviso or the Water Treatment Plant facility, and, in fact, may be highly counter productive and dangerous.

Due to subsidence in Golden Triangle industrial park, City of San Jose installed pumps of 5000 cfs capacity to outfall into Guadalupe River at Montague Expressway, and pumps at Norm Minetta Airport contribute half that amount again. This estimates total 100 year flows in Guadalupe River at 24,500 cfs, and global warming increase in storm intensities and longevity, does bring Coyote Creek to an equivalent volume of storm flow.

Initial COE estimates of design flows for these rivers included a proviso that upstream reservoirs would retain peak storm event with capability to attenuate flows Fluvial flow criteria is not referenced in COE levee study.

The COE proposal to return 2,900 acres of salt ponds to tidal action could possiboy result in high bay levels in South Bay in high intensity storm events when wind and wave action drive up high tide an additional 3 feet. This condition, in conjunction with low barometric pressure can result in fluvial reflux, in which Guadalupe or Coyote storm waters would over-bank levees to flow down behind 3.8 mile levee and flood Alviso Community.

Have heard that Alviso has been promised a 140 cfs (?) pump to relieve flooding instances.

Besides incorporating the major constraint of a closed bay, with wind and wave ride-up, similar to Adriatic's interface with Venice, the COE must consider up to 12 feet of subsidence in surrounding lands, as well as the artesian upwelling of groundwater resources supplemented by imported water percolated into aquifers. This is In addition to fluvial flows from streams of the Diablo Range, Mount Hamilton, and Mount Umunhum. Also, one should not forget outflow form the San Jose Water Treatment Plant of approximately 200 mgd.

Conservation priorities that needed to be incorporated into the COE levee design are the endangered species of Salt Marsh Harvest Mouse and California Clapper Rail that historically have relied on levees and marshes in project area for refugia. Raised water level in New Chicago Marsh prime Salt Marsh Harvest Mouse habitat alresdy give one concern. The edge of South Bay appears to reach far inboard of proposed levee alignment.

Then, there is protection of the infrastructure of railroad lines and highways which do not find COE proposal has seriously addressed. (Nor did recent Plan Bay Area) The proposed levee has a 150 foot tide gate behind Alviso that cuts across Union Pacific's main West Coast line at right angles. If this tide gate is closed during extended storm events, it will shut down the rail line for that period. Study doesn't consider this contingency.

Proposed COE levee offers no protection for City of Milpitas or Highway # 880, which will be at increased risk from wind and wave action of this inland sea which will result from returning these salt ponds to tidal action. Will surface mail Milpitas flood photo of 1998 event to illustrate extreme susceptibility of area to high water.

To summarize, believe COE proposed 3.8 mile levee alignment with its return of 2900 acres of salt ponds to tidal action is deficient in analysis of cumulative impacts to endangered species of the South Bay marshes, to residents of Alviso and Milpitas, as well as to railroad and highway infrastructure.

Alternatives that believe should have been addressed would be placement of COE levee outboard of Union Pacific Railroad Line that extends from Alviso to Drawbridge, (equivalent 3.8 mile length). Also, to reinforce levees of Pond 18 to create retention basin for Water Treatment Plant outflow for extent of a storm system. Raised refugia islands need consideration while COE levee vegetation is proven as established viable habitat.

Thank you for kind consideration of my concerns.

Libby Lucas